

### Abstract

A method and system in which a consumer creates a shopping list using a small wireless bar code scanner and an intelligent base station that gets related bar code information from a merchant's database via the Internet. The consumer uses this method to shop in a store, Mail Order / Telephone Order (MOTO) or on the Internet using the created shopping list.

The consumer creates the shopping list by using a small wireless bar code scanner to scan in merchandise Universal Product Codes (UPCs), which are available on product labels, and in product catalog.

The consumer then transmits the scanned bar codes to an intelligent device owned by the consumer, which know as a base station. Examples of a base station are an Internet Appliance, or a PDA, or a PC or a cell phone.

Data transmission between the bar code scanner and the base station is via radio frequency standards, such as Bluetooth. The bar code scanner uses the Bluetooth protocol to check to see if a registered base station is within its communications perimeter, and finding an available device transmits any available UPCs that it has stored.

A process running on the base station stores the transmitted UPCs in a local database. The local UPC database eliminates duplicate UPCs, but records the date and time which it received the UPC, as well as any new additional information.

The base station connects via the Internet to a UPC database stored at a merchant, or to a central UPC database and downloads the textual description of the UPC. Coupons and other information are also downloaded at this time. This data is known as the UPC's supporting information. Using Bluetooth, the base station transmits UPC supporting information to the bar code scanner, or other registered base stations within its communications perimeter. An advantage of this system is that copies of a shopping list can be resident and kept in synch on multiple base stations. This multiplicity of

~~synchronized copies is maintained without the consumer's constant intervention. The consumer can print out the created shopping list on any printer available on a base station, or one that is Bluetooth enabled.~~

~~The barcode scanner stores, and displays UPC descriptions on the device, that have been transmitted from the base station. This allows the consumer to take the barcode scanner on a shopping expedition, or simply reference the shopping list without having to access a base station.~~

~~The consumer can then order the system's created shopping list items via the telephone (MOTO), on the Internet, or the consumer can go to a store and purchase the items. The system provides various ways for the consumer to get the shopping list in hand, i.e. delivery, drive through pickup or in-store pickup.~~

A method and system whereby a consumer creates a shopping list using a portable barcode scanner and an intelligent base-station. The entered barcodes are downloaded to the base-station from the barcode scanner. The base-station retrieves related barcode information from a barcode database via the Internet. The barcode database can belong to a merchant, or a generic shopping service.

The base-station can be a consumer's computer, or some other smart electronic device. The base-station maintains a predictive shopping list database for all barcodes entered via the barcode scanner. The database learns the shopping consumption habits of the consumer over a period of time and ensures that when the consumer is ready to shop no previously needed, but currently forgotten, items are left off of the shopping list.

The consumer uses this method to shop in a store, or via Mail-Order / Telephone-Order or on the Internet using the created shopping list.